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A
SYLLABUS
OF
LECTURES
ON
CHYMISTRY
AND
PHARMACY.

BY

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> ——— *Quid tentare nocebit?*
>
> OVID.

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PART I. Of CHYMISTRY.

CHYMISTRY is that Branch of Natural Philoſophy which treats of the particular Properties of Bodies, and is thereby diſtinguiſhed from Mechanical Philoſophy, which treats of the General Properties of Bodies.

CHAP. I.

OF THE OBJECTS of CHYMISTRY.

THE PARTICULAR OBJECTS of Chymiſtry may be referred to the FORMS of SALINE, INFLAMMABLE, METALLIC, EARTHY, WATERY, and perhaps, AEREAL. And Bodies perhaps the moſt compounded in Nature, may be reduced to one or other of the above Forms.

SECT. I.

SALINE BODIES are SIMPLE or COMPOUND; They are ſoluble in Water, and ſapid.

The SIMPLE SALTS are ACID or ALKALINE;

ACIDS are four, they change the Syrup of Violets and other vegetable Blues to a red Colour, and they efferveſce with Alkaline Salts containing Air.

ALKALINES change the Syrup of Violets, or blue vegetable Juices, to a green Colour, containing Air, they efferveſce with Acids.

The ACIDS are VITRIOLIC, NITROUS, MURIATIC, and VEGETABLE.

Of the laſt there are four principal Species. 1. The NATIVE, *Succus Lemonum*, &c. 2. The FERMENTED, *Acetum*, *Tartarum*. 3. The DISTILLED, *Acidum Abietis*. 4. The SUBLIMED, *Flores Benzoin*.

Of

Of the FOSSIL ACIDS there are Three whoſe Properties have been but lately diſcovered;

1. *Sal. Succini.* 2. *Sal. Sedativum Hombergii,* and 3. *Acidum Arſenici.*

The ANIMAL KINGDOM affords us the

1. *Acidum Formicarum,* and 2. *Acidum Urinæ;*

The Enumeration of the four principal Species is ſufficiently proper for our Purpoſe.

The ALKALINES are FIXED or VOLATILE.

The FIXED have no Smell, and are capable of ſuſtaining a great Degree of Heat without Diſſipation —*Sal. Tartari,* &c.

The VOLATILE are diſſipated by a gentle Heat, and have a ſtrong pungent Odour—*Sal. Volat. Ammon.* &c.

The COMPOUND SALTS are NEUTRAL, METALLIC and EARTHY;

The NEUTRAL are ſuch as have an ACID for one Ingredient, and an ALKALI for another, united together in that Proportion, ſo as not to change the Colour of Syrup of Violets, or vegetable Blues, and not to efferveſce upon the Addition of either Acid or Alkali, *Nitre,* &c.

The METALLIC are ſuch as have an ACID for one Ingredient, and a METAL for another, united together as the former, *Vitriols.*

The EARTHY have an ACID for one Ingredient, and an EARTH for another, united together in a ſimilar Proportion, *Alum,* &c.

SECT. II.

INFLAMMABLE BODIES are in the Forms of OIL, SULPHUR, and ARDENT SPIRIT, each of them ſuppoſed to depend upon a PHLOGISTON.

They are ſuch as when apply'd to burning Bodies, or when having a certain Degree of Heat generated in them, are ſet on fire, and continue burning until their whole Maſs is conſumed, and a luminous Vapour, called Flame, always appears upon their Surface.

They are to be diſtinguiſhed from Bodies only capable of Ignition.

OILS are ANIMAL, VEGETABLE and FOSSIL.

ANIMAL and VEGETABLE OILS are EXPRESSED, ESSENTIAL and EMPYREUMATIC;

EXPRESSED OILS are of a bland and mild Taſte, without any ſenſible Odour, and not ſoluble in ardent Spirits. *Adeps Ol. Olivarum*, &c.

ESSENTIAL OILS are of a remarkable Odour and acrid Taſte, reſembling the Subſtances from which they are taken; they are ſoluble in Spirit of Wine, *Ol. Lavendul. Eſſentia Lemonum, Moſchus, Balſamum, Reſina*, &c.

EMPYREUMATIC OILS have a ſenſible Smell, and Empyreumatic Taſte, not reſembling the Subſtances from which they are obtained, but depending upon the Degree of Heat apply'd during their Diſtillation—*Ol. Cornu Cervi*, &c.

FOSSIL OIL is of one Kind only;

It has a Taſte and Odour different from the Empyreumatic, and they are difficultly ſoluble in Spirit of Wine—*Naptha, Petroleum, Bitumina*, &c.

To the Head of OILS belongs ÆTHER, which is a Fluid of conſiderable Volatility, and miſcible with ardent Spirits:

SULPHUR is a dry friable Body, not miſcible with water .It is of one kind only in Engliſh, named Brimſtone, but inLatin is called by the Epithet of MINERAL, to diſtinguiſh it from the *Soufre Principe*, which is the PHLOGISTON of the Chymiſts.

ARDENT SPIRITS are miſcible with Water, and of little ſpecific Gravity.

They are the Product of Fermentation, the chief Example is *Spirit* of *Wine*, which in its greateſt Purity is named *Alcohol.*

SECT. III.

METALLIC SUBSTANCES are METALS, or SEMI-METALS;

They are opake Bodies, of conſiderable ſpecific Gravity, fuſible in the Fire, and after being cooled, concrete in the ſame Form as before.

METALS are MALLEABLE. *Gold, Silver, Quickſilver, Lead, Tin, Copper* and *Iron*.

The two firſt are ſaid to be NOBLE and PERFECT,the four laſt are named BASE and IMPERFECT METALS.

SEMI-

SEMI-METALS are not MALLEABLE—*Zinc*, *Antimony*, *Biſmuth*, *Arſenic*, *Platina*, *Cobalt* and *Nickel.*

METALLIC SUBSTANCES, as found in the Earth, are commonly found in the State of ORE mineraliſed with *Sulphur* and *Arſenic.*

When this ORE is diſperſed among ſtony or earthy Subſtances it is ſaid to be inherent in a MATRIX.

PYRITES is a Term chiefly applied to Sulphur when combined with Metal in ſo large a Proportion as to render the extracting of it profitable.

SECT. IV.

EARTHY BODIES are found in a dry and ſolid Form, are not inflammable, and, after Fuſion, concrete again in the Form of Glaſs. They are of four Kinds;

1. ABSORBENT, otherwiſe named *Alkaline*, and ſometimes, though improperly, term'd *calcarious.*

They are ſoluble in Acids.—*Magneſia*, &c.

2. CHRYSTALLINE, otherwiſe named *Vitreſcent*— They are not ſoluble in Acids, and ſtrike fire with Steel—*Precious Stones*, *Flints*, &c.

3. ARGILLACEOUS, are not ſoluble in Acids, do not ſtrike fire with Steel, and are ductile upon the Addition of Water.—*Clays* and *Boles.*

4. TALKY, are of a fibrous or laminated Structure, not ſoluble in Acids, and incombuſtible in the Fire.—*Asbeſtus*, &c.

SECT. V.

WATERY BODIES are COMMON or MINERAL.

SECT. VI.

AERIAL BODIES are COMMON or MEPHITIC.

They are permanently Elaſtic Fluids.

CHAP. II.

OF THE OPERATIONS of CHYMISTRY.

The CHANGES of the Qualities of Bodies produced by Chymiſtry, are all of them produced by COMBINATION or SEPARATION.

COMBINATION depends upon ATTRACTION, and this upon FLUIDITY, which is employed in SOLUTION or FUSION.

SEPARATION depends upon ELECTIVE ATTRACTION, or the ACTION of FIRE.

ELECTIVE ATTRACTION is ABSOLUTE or RELATIVE, SINGLE or DOUBLE.

In all Caſes, as Attraction in general, the Elective depends upon FLUIDITY; and therefore, alſo upon SOLUTION or FUSION.

The FIRE ſeparates Bodies in conſequence of their different Degrees of FUSIBILITY, and acts by FUSION; or their different Degrees of VOLATILITY, and then acts by EXHALATION.

Hence all the ſeveral Operations of Chymiſtry may be referred to SOLUTION, FUSION, or EXHALATION.

SECT. I.

OF SOLUTION.

The ſolid Body to be diſſolved is named the SOLVEND, the Fluid applied to it, the *Solvent* or MENSTRUUM.

CHYMICAL SOLUTION is to be diſtinguiſhed on one Hand from DIFFUSION, which has been named *Mechanical Solution*; and on the other, from PROPER MIXTURE.

Both in SOLUTION and MIXTURE there happens a SATURATION.

The Veſſels commonly, and moſt properly, employed in Solution, are named MATRASSES or BOLT-HEADS. When a Matraſs is cloſed, by another ſmaller inverted and joined to it, this is called a CIRCULATORY APPARATUS.

SOLUTION is aſſiſted by the DIVISION of the Solvend, the AGITATION of the VESSEL, the Application of HEAT and of AIR.

In the Practice of Solution, it is commonly proper to avoid EFFERVESCENCE and DISSIPATION.

The *inteſtine Motion*, named EFFERVESCENCE, is to be diſtinguiſhed from thoſe of EBULLITION and FERMENTATION.

SOLUTION, according to certain Differences in the Practice, is named MACERATION, INFUSION, DECOCTION, DIGESTION, CIRCULATION, DELIQUESCENCE, or AMALGAMATION.

DISSOLVED Bodies may be ſeparated from their Menſtruums, by PRECIPITATION, CHRYSTALLIZATION, and EVAPORATION.

PRECIPITATION belongs to this Head. It depends upon *Elective Attraction*, and the Body added is named the PRECIPITANT.

There are four Caſes of Precipitation ; 1. Of the DISSOLVED Body alone. 2. Of the DISSOLVED Body, with the PRECIPITANT. 3. Of the Menſtruum alone. 4. Of the MENSTRUUM, with the PRECIPITANT.

In the two firſt Caſes, the dry Body falling down, is named a PRECIPITATE, *Magiſtery*, or *Calx*.

When a Metallic Subſtance can be combined with an Acid, in a dry Form only, the Combination is named CORROSION.

When a PRECIPITATE has a Part of the ACID, which had formerly diſſolved it, ſtill adhering to it, the waſhing of that Acid by Water, is named EDULCORATION.

In moſt of the Practices of this Section, there is Occaſion for COLATURE and FILTRATION, which are facilitated by a previous DEPURATIO *per ſubſidentiam*.

Moſt Inſtances of COAGULATION may be referred to PRECIPITATION.

SECT. II.

Of FUSION.

Fuſion combines by what has been named DRY SOLUTION, and ſeparates by ELECTIVE ATTRACTION, or the ACTION OF FIRE, in different Degrees, upon different Bodies.

When an ELECTIVE ATTRACTION takes Place under Fuſion, the Operation, is named a PRECIPITATION BY FUSION, *Præcipitatio fuſoria*; and in the Caſe of Metallic Subſtances, the Parts ſeparated are named SCORIÆ and REGULUS.

The FUSION of Bodies may be conſidered as of two Kinds; the one, where the Body melted ſuffers no other Change but that by the Action of the Fire, from ſolid it becomes fluid; and upon removing the Fire the Body concretes into the ſame Form as before. The other Caſe is, where the Body melted ſuffers ſuch a Change, that, upon cooling again, it does not concrete in the ſame Form as before. Of this, the moſt noted Inſtance is in the VITRIFICATION of Bodies.

The Fire ſeparates under Fuſion, by acting upon the COMMON FUSIBILITY, or by acting upon the VITRESCENCY of particular Bodies.

Upon the firſt depend ELIQUATION and CONGELATION.
Upon the ſecond depend SCORIFICATION and CUPELLATION.

When a Metallic Subſtance has been deprived of its Metallic Form, and is, by certain Means, under Fuſion, brought back to it again, the Operation is named REDUCTION.

The Veſſels moſt commonly employed in Fuſion, are named CRUCIBLES.

In Scorification, &c. are employed TESTS, CUPELS, and MUFFLES.

SECT. III.

Of EXHALATION.

EXHALATION is various, as it is practiſed for obtaining

- The fixed Parts
  - of Fluids by EVAPORATION, or
  - of Solids by USTULATION, or CALCINATION.
- The Volatile Parts
  - in a Fluid Form by DISTILLATION,
  - in a Solid Form by SUBLIMATION.

Of a like Nature with theſe two laſt, but ſomewhat different in the Manner of operating, are CEMENTATION and INFLAMMATION.

Under the laſt is comprehended what has been named the *Sublimation* of *Geber*.

EVAPORATION, according to certain Circumſtances of the Subject, is named INSPISSATION or EXTRACTION.

CHRYSTALLIZATION ſometimes depends upon diminiſhing the HEAT, but as more commonly upon diminiſhing the QUANTITY of the Menſtruum, it belongs to this Head.

EVAPORATION is properly carried on by the joint Action of FIRE and AIR.

DISTILLATION, according to the Subject, is diſtinguiſhed into SIMPLE DISTILLATION, and DISTILLATION with ADDITION.

SIMPLE DISTILLATION, is otherways, but improperly, named *the Chemical Analyſis*.

In DISTILLATION with ADDITION, this is made for ſeveral Purpoſes.

1. By an ELECTIVE ATTRACTION, for ſetting looſe a volatile Part.
2. By the ſame for fixing one of two volatile Parts,
3. By the ſame, for ſeparating a fixed Part, and by uniting with this for volatilizing it.

4. By uniting with the whole of a Mixt, for volatilizing it.

5. By dividing an Aggregate, for preventing its Fuſion, and thereby for favouring its Reſolution.

6. By dividing an Aggregate, for preventing its Intumeſcence, and thereby favouring the Separation of the Parts reſolved.

7. For regulating the Degree of Heat.

When a Matter obtained by one Diſtillation is ſubjected to a ſecond, that it may be more entirely ſeparated from Matters that adhered to it in the firſt; ſuch ſecond Diſtillation is named RECTIFICATION, DEPHLEGMATION, or CONCENTRATION.

When, in the Caſes third and fourth, a Matter obtained by one Diſtillation, is returned upon the ſame Matter it had been drawn from before, to be again diſtilled from it, for obtaining a ſtronger Impregnation; ſuch ſecond Diſtillation is named a COHOBATION.

DISTILLATION, according to the Form of the Veſſels employed, is diſtinguiſhed into

1. That *per aſcenſum*, in which the CUCURBIT and ALEMBIC are employed
2. That *per obliquum*, in which the RETORT is employed.
3. That *per deſcenſum*, in which the Vapours are driven into a Veſſel, placed below the Matter from which they are drawn.

In the PRACTICE of DISTILLATION, Regard is to be had to the Choice of Veſſels in Matter and Form.

To the Manner of putting the Matter into the diſtilling Veſſels, and filling them to a proper Degree.

To the cloſing the Junctures of the Veſſels, by LUTING, or otherways

To the proper Application of the Fire.

To the preventing a too great Intumeſcence of the Matters ſubjected to Diſtillation.

To prevent the burſting of the Veſſels by the Quantity, or the Elaſticity of the Vapours raiſed in the Diſtillation.

To prevent the Matter diſtilled from concreting in the Neck of the Retort, in ſuch Quantity as to ſhut it up,

To the aſſiſting the Diſtillation, by throwing Air into the diſtilling Veſſels,

To the Separation, where it is proper, of the ſeveral Matters ariſing ſucceſſively in Diſtillation.

To the opening of the Veſſels, when the Operation is finiſhed.

To the Separation of different Matters that have been collected in one and the ſame Receiver.

To attend to the Nature of the Fumes eſcaping from the Veſſels in the Courſe of the Operation.

SUBLIMATION is conducted upon the ſame Principles as Diſtillation. Its Products are different, as they are in Powder, when they are named FLOWERS, or as they are in ſolid Concretes, when they are named SUBLIMATES.

APPENDIX to CHAPTER II.

OF THE

APPLICATION of FIRE.

In the Application of the HEAT, communicated by burning bodies, we conſider the DIRECTION of it, and the REGULATION of its Degree.

The DIRECTION is of three Kinds.

1. The NAKED, or *open* Fire.
2. The REVERBERATORY Fire.
3. The TRANSMITTED Heat

The firſt is employed where a greater Degree of Heat is required.

Where the Matter to be acted upon cannot be committed to Veſſels.

Where the Matter to be acted upon is not hurt by the Contract of the burning Feuel.

Where the Veſſels employed are fit to ſuſtain the immediate Action of the burning Feuel.

Where, in the Courſe of the Operation, it may be neceſſary ſuddenly to withdraw the fire.

The REVERBERATORY Fire is employed where a great Degree of Heat is required.

Where the Heat is to be applied to a great Quantity of Matter, or to a great Number of Veſſels at the ſame Time.

Where

Where the immediate Contact of the Feuel would diſturb the Operation.

Where it is uſeful to inflame and conſume the Smoke ariſing from the burning Feuel.

Where this Direction of the Fire is beſt ſuited for collecting the Matters melted by it.

The TRANSMITTED HEAT is employed where a moderate Degree of Heat only is required

Where a very gradual, and exactly conducted Application of Heat is neceſſary.

Where an exactly determined Degree of Heat is neceſſary.

Where the Matters operated upon may be hurt by a Communication with the Feuel and Flame, or the Smoke ariſing from them.

Where the Veſſels employed are not fit to ſuſtain the immediate Action of burning Feuel.

The REGULATION of the Degree of Heat depends upon 1. The Nature of the Feuel. 2. The Quantity of the Feuel enflamed. 3. The more or leſs entire Inflammation of the Feuel. 4 The quicker or ſlower Inflammation of the Feuel, depending upon the Velocity of the Air applied, determined by *Bellows, a Water Blaſt, an Æolipile,* or *the Structure of Furnaces.* 5. The more or leſs exact Confinement of the Heat ariſing from the burning Feuel.

By theſe Conſiderations of the DIRECTION and REGULATION of HEAT, is determined the Conſtruction of FURNACES,

The PARTS of a Furnace may be the *Aſh-hole,* the *Focus,* the *Laboratory,* the *Chimney.*

The chief SPECIES of *Furnaces,* are the *Forge,* the *melting* Furnace, the *diſtilling* Furnace, with a *naked Fire,* the *Aſſay* Furnace, the *Reverberatory diſtilling* Furnace, the *Iron Founders* Furnace, the *Potter's* Furnace or *Kiln,* the *diſtilling Sand* Furnace, the *Athanor,* the *Lamp* Furnace.

PART.

PART II. Of PHARMACY.

CHAP. I.

Of VEGETABLE and ANIMAL Subſtances.

SECT. I.

Of the COLLECTION of SIMPLES.

1. From the proper Soil.
2. From the Climate and Expoſure.
3. At the proper Time of Vegetation with Reſpect to Roots, Herbs, Flowers, Seeds, and Fruits, Woods and Barks, Exſudations.

SECT. II.

Of the Preſervation of Vegetable and Animal Subſtances.

1. By avoiding Diſſipation.
2. By avoiding Fermentation, which is done by avoiding Moiſture, by excluding Air, by avoiding too great Degrees of Heat and Cold, by avoiding Inſects, and by applying Antiſeptics, ſuch as *Salt*, *Vinegar*, *Sugar*, and *Aromatics*.

SECT. III.

Of the SEPARATION of the Parts of VEGETABLE and ANIMAL Subſtances.

I. By TRITURE.
II. By EXPRESSION for watery Juices or for Oils.
III. By EMULSION.

IV. By

IV. By SOLUTION.

A. By Solution in WATER, of MUCILAGES, SWEETS, BITTERS, AROMATICS, and ASTRINGENTS, By MACERATION, INFUSION, or DECOCTION.
B. By Solution in VINEGAR.
C. By Solution in WINE.
D. By Solution in PROOF SPIRIT.
E. By Solution in RECTIFIED SPIRIT.
F. By Solution in all of the above, with the Addition of SALINE MATTER.

1. Of ACIDS to ALCOHOL.
2. Of FIXED ALKALINES to ALCOHOL.
3. Of VOLATILE ALKALI to ALCOHOL.
4. Of NEUTRALS to WATER and to RECTIFIED SPIRIT.

G. By Solution in LIME WATER.
H. By Solution in OILS both Expreſſed and ESSENTIAL.

V. By ſeparating Subſtances from the Fluids that hold them diſſolved

A. By EVAPORATION, which comprehends, INSPISSATED JUICES, EXTRACTS, SYRUPS, HONEYS, and GELLIES
B. By CHRYSTALLIZATION.
C- By PRECIPITATION.

VI. By DISTILLATION.

A. WITHOUT ADDITION.
B. WITH ADDITION of WATER, of PROOF SPIRIT, of RECTIFIED SPIRIT, of VOLATILE ALKALI.

VII. By CALCINATION.

SECT. IV.

Of the COMPOSITION of VEGETABLE and ANIMAL Subſtances.

I. MORE INTIMATE COMBINATION by SOLUTION, DISTILLATION, and PROPER MIXTURE.

II. MORE LOOSE AGGREGATION.

A. In POWDER.
B. In ELECTUARY.
C. In PILLS.
D. In TROCHES.
E. In OINTMENTS and LINIMENTS.
F. In PLAISTER.
G. In POULTICE.

CHAP. II.

Of FOSSILS and other Subſtances not ſtrictly reducible to the Vegetable and Animal Kingdom.

SECT. I. Of SALTS.

ACIDS.

1. ACIDUM VITRIOLICUM.

Oleum Vitrioli; *Spiritus Sulphuris per Campanum*, L. *Spiritus Vitrioli tenuis et fortis*; *Aqua ſulphurata*, L. *Gas Sulphuris*; *Spiritus Aluminis*; *Acidum Univerſale Catholicum primigenium*; *Acidum Aereum Atmoſphericum*; *Acidum Vagum Foſſile.*

2. ACIDUM NITROSUM.

Spiritus Nitri Glauberi, L. *Aqua Fortis*, *ſimplex vel duplex.*

3. ACIDUM MURIATICUM.

Acidum et Spiritus Salis Marini; *Spiritus Salis Glauberi.* *Aqua Fortis Compoſita.* *Aqua Regia.*

4. SAL. SEDATIVUM HOMBERGII.

5. SPIRITUS et SAL. SUCCINI.

ALKA-

ALKALINES.

1. ALKALI FIXUM. FOSSILE.

Alkali Minerale ; Terra Salis marini ; Natrum ; Nitrum Veterum ; Nitrum Ægyptiacum ; Soda et Barilla Hiſpan. Kelp. Angl.

2. ALKALI CALCAREUM.

Calx viva.

3. ALKALI VOLATILE.

Spiritus Salis Ammoniaci ; Idem *cum Calce viva. Spiritus Fuliginis ; Spiritus C. C. Sal. Volatilis Ammoniaci ; Sal. Cornu Cervi.*

NEUTRALS.

ACIDUM.	ALKALI.	NEUTRUM.
Vitriolicum.	*Vegetabile*	*Tartar. Vitriolat.*
	Foſſile	*Sal. Glauberi*
	Volatile	*Ammon. Vitriol.*
Nitroſum.	*Vegetabile*	*Nitrum Commun.*
	Foſſile	*Nitrum Cubicum*
	Volatile	*Ammon. Nitroſum.*
Muriaticum.	*Vegetabile*	*Sal. Digeſt. Sylvii*
	Foſſile	*Sal. Communis*
	Volatile	*Ammon. Commun.*
Vegetabile.	*Vegetabile*	*Tartar. Regenerat.*
	Foſſile	*Sal. Rupellenſ.*
	Volatile	*Ammon. Vegetabile*

1. TARTARUM VITRIOLATUM.

Nitrum Vitriolatum ; Nitrum Stibiatum ; Sal. Polychreſtum ; Arcanum Duplicatum ; Sal. de Duobus ; Sal. Enixum Paracelſi.

2. SAL. GLAUBERI.

Sal. Catharticum Glauberi ; Sal. Mirabile Glauberi ; Vitriolum Natroſum.

3. AMMON. VITRIOL.

Vitriolum Volatile ; Ammoniacum Vitriolicum ; Ammoniacum ſecretum Glauberi.

4. NITRUM COMMUNE.

Nitrum Vulgare ; Nitrum Lixivioſum.

5. NITRUM CUBICUM.

Nitrum Natroſum ; Nitrum Quadrangulare.

6. AMMON. NITROSUM.

Nitrum Volatile ; Nitrum ſemivolatile, Boerh. Nitrum Ammoniacale.

7. SAL. DIGEST. SYLVII.

Muria Lixivioſa ; Sal. Marinum Regenerat. Boerh. Spiritus Sal. Marin. Coagulat. P. L.

8. SAL. COMMUNE.

Muria Natroſa ; Sal. Cibarum ; Alimentary Salt Hill. Sal. Marinum ; ſal. Fontanum ; ſal. Gemmæ ; ſal. Montanum.

9. AMMONIACUM COMMUNE.

Muria Volatilis ; Sal. Ammoniacum Vulgare.

10. TARTARUM REGENERATUM.

Sal. Diureticus *Terra foliata Tartari* *Arcanum Tartari*	Ex *Aceto* & *Alk.* Fixo.
Tartarum ſolubile *Tartarum Tartarizatum*	*Ex Tart.* & *Alk. Fixo.*

11. SAL. RUPELLENSE.

Tartarum Nitroſum ; Sel de Seignette.

12. AMMON. VEGETABILE.

Spiritus Mindereri.

SECT. II.

Of INFLAMMABLES.

1. OILS.

Spiritus Æthereus; Oleum Succini.

2. SULPHUR.

Flores Sulphuris.

3. ALCOHOL.

Spiritus Vitrioli Dulcis, L. *Spiritus Nitri Dulcis*, L. *Spiritus Salis Dulcis*, L. *Spiritus Salis Ammon. Dulcis.*

SECT. III.

Of METALLICS.

1. GOLD.

Aurum Fulminans; Aurum Potabile, Ph. Paris.

2. SILVER.

Cauſticum Lunare, L. *Lapis Infernalis; Pilulæ Lunares Boylei.*

3. LEAD.

Plumbum Uſtum; Minium; Ceruſſa; Sacharum Saturni; Acetum Lethargyrites; Extract. Saturni Goulard. Tinctur. Saturnina; Tinctur. Antipthiſica.

4. TIN.

Stannum pulveratum; Calx Jovis; Sal. Jovis; Aurum Muſivum.

5. COPPER.

Æs Uſtum; Vitriolum Cæruleum; Solutio Æris in Alk. Volat. Boerh. Ærugo præparata; Ærugo chryſtalliſat. Ens Veneris; Ammoniacum Cupreum, Nov. Act. Natur. Curioſor. tom. I.

6. IRON.

Hæmatites Lapis præparatus ; Pulv. ſubtiliſſ. Lemerii ; Chalybis Rubigo præparata ; Sal. Martis ; Tinct. Styptica ; Vitriolum calcinatum ; Colcothar Vitrioli ; Chalybs cum Sulphure præparatus ; Tinctura Martis in Spiritu Salis ; Flores Martiales ; Lixivium Martis ; Vinum Chalybeatum.

7. QUICKSILVER.

A. Crude.

Hydrargyrus purificatus L.

B. In Vapour.

Mercurius ad ſuffumigia

C. Triturated.

a. alone.

Tragea Keyſeri

b. with Honey.

Pilulæ Mercuriales

c. with Balſam.

Pilulæ Mercuriales L.
Unguentum cæruleum fortius et mitius L.
Emplaſtrum commune cum Mercurio L.
Ceratum Mercuriale L.

d. with Reſin.

Pilulæ Mercuriales
Æthiopicæ

e. with Suet.

Unguentum Mercuriale

f. with Abſorbents.

Mercurius alcaliſatus

g. with Sugar.

Mercurius ſaccharatus

h. with Sulphur.

Æthiops mineralis L.
antimonialis Ph. Paup.

D. Sublimed with Sulphur.

Cinnabaris factitia

——— antimonii

E. Calcined.

a. alone.

Mercurius calcinatus L.

——— *præcipitatus per ſe*

b. with Gold,

Mercurius præcipitatus ſolaris Aſtruc.

F. Rendered ſaline.

a. by Vitriolic Acid.

Mercurius emeticus flavus L.

Mercurius præcipitatus flavus

Turpethum minerale

b. by Nitrous Acid.

Solutio Mercurii

Calx Mercurii

c. by Muriatic Acid.

Mercurius ſublimatus corroſivus L.

———præcipitatus albus Boerh.

Aqua aluminoſa

—— phagedænica

Mercurius violaceus diaphoreticus Aſtruc.

Flores ammoniaco Martiales

Solutio Mercurii per deliquium Aſtruc.

d. by Vegetable Acid.

Mercurius tartariſatus

Keiſers Pills

G. Saline Preparations corrected.

a. Rendered mild

aa, by abſtracting Acid.

aaa. by Calcination.

Mercurius corroſivus ruber L.

——— *calcinatus*

——— *præcipitatus ruber*

bbb. by Attraction.

aaaa. of Water.

Pulvis Principis Lewis

bbbb. of Alchohol.

Mercurius corallinus Lewis

Panacæa Mercurii

cccc. of Water and Alcohol.

Arcanum corallinum Lewis

Panacæa Mercurii rubra Lewis

ccc. by Attraction and Precipitation.

aaaa. of fixed Alkali.

Mercurius præcipitatus fuſcus 1744.

bbbb. of Volatile Alkali.

Mercurius præcipitatus albus

cccc. of fixed Vol. Alkali.

Mercurius præcipitatus albus L.

Unguentum e Mercurio præcipitato L.

dddd. of Volatile Alkali and Copper.

Mercurius præcipitatus viridis

bb. by Addition of Mercury.

Mercurius ſublimatus dulcis L.

calomelas

Aquela alba

cc. by Addition of Unguent.

Unguentum citrinum

b. rendered acrid or kept ſo.

aa. by rediſſolving precipitate.

Mercurius præcipitatus ſolutus

bb. by Addition of Acid.

Solutio ſublimati cum ſpir. ſalis

cc. by ſuſpending with ammonical Salt.

Mercurius corroſivus nitroſus

Ward's white Drop.
Mercurius corroſivus muriaticus

8. ANTIMONY.

A. not ſaline.

a. Regulus with different proportions of Sulphur.

Antimonium crudum præparatum L.
Regulus medicinalis
Kermes minerale
Sulphur antimonii præcipitatum L.
Sulphur auratum antimonii
Pilul. Plummeri

b. Regulus alone.

Regulus antimonii ſimplex
Martialis

c. Reguline parts calcined

aa. without Addition.

Antimoium crudum incineratum
Vitrum antimonii
——— ceratum

bb. with Addition of Nitre

Crocus antimonii mitior Lewis
Crocus antimonii
——— *metallorum*
——— antimonii lotus L.
Pulvis febrifugus Noſocom.
Antimonii emeticum mitius Boerh.
Antimonium diaphoreticum nitratum
————————— lotum
Calx antimonii L.
Antihecticum Poterii 1744

B. render'd ſaline.

a. by Vitriolic Acid.

Antimonium viriolatum Werlhof.

b. by Nitrous Acid.

Bezoardicum minerale
———— Joviale

c. by Muriatic Acid.

Butyrum antimonii
Cauſticum antimoniale L.
Mercurius vitæ 1744.

d. by Vegetable Acid.

Sapa vomitoria Sylvii
Vinum antimoniale L
——— emeticum
Tartarum emeticum

9. ZINK.

Calaminaris lapis præparatus
Tutia præparata L.
Sal. Vitrioli
Vitriolum Album

SECT. IV.

OF EARTHS.

Alumen uſtum
Terra aluminoſa
Bolus armena præparata
Lazuli lapis preparatus
Magneſia Alba.

FINIS.